

RESPONSE UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 10/705,233

Claim Rejection Under 35 U.S.C. § 112

Claims 1-10 are rejected under 35 U.S.C. § 112, first paragraph. Specifically, the Examiner asserts that the recited “positioning member” is not described in the original specification.

In response, Applicant request that the Examiner withdraw the rejection in view of the fact that original specification provides support for the recited “positioning member.” Specifically, the specification states that the “core wire guide portion 20a is formed to produce a clearance between the deepest portion 20a-1 thereof.”² Accordingly, the core wire guide portion 20a is an *exemplary* embodiment of the recited positioning member monolithically formed with the main body.

Claim Rejection Under 35 U.S.C. § 102 and 103

Claims 1-5, 7, 9 and 10 are rejected under 35 U.S.C. § 102(b) as being anticipated by Borsuk et al. (4,666,238). Claims 6 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Borsuk et al. (4,666,238).

Claims 1-5, 7, 9 and 10

With respect to independent claim 1, Applicant respectfully traverses the rejection at least because Borsuk does not teach or suggest all of the claims’ recitations. For example, Borsuk does not teach or suggest the claimed ferrule having a main body formed with a hole into which a core wire of the optical fiber is inserted, a positioning member monolithically formed with the main body, and a leading end portion monolithically formed with the main body.

² See page 7, lines 24-25 & FIG. 1 of the original specification.

RESPONSE UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 10/705,233

According to the rejection, the Examiner asserts that convex lens 12, main body 16, and positioning member of Borsuk are formed as a single unitary structure. It appears to be the Examiner's position that Borsuk's retention device 10 shown in Fig. 1 corresponds to the recited *ferrule*. Specifically, it appears to us that the Examiner's position is that some portion of the monolithic retention device 10 (and not the internal eyelet 76) corresponds to the recited "positioning member."

However, Borsuk's retention device 10 cannot reasonably correspond to the claimed ferrule with a main body having "a main body, formed with a hole into which a core wire of the optical fiber is inserted." As is clear from Fig. 1 of Borsuk, the monolithic retention device 10 is *not a ferrule* (i.e., shaped as a ring or cap placed around a pole or shaft).

Moreover, none of the other various embodiments of Borsuk 's monolithic retention devices 70, 100, 200, 10'" could reasonably be considered the claimed *ferrule* having a main body formed with a hole into which a core wire of the optical fiber is inserted. As shown in Figs. 5-9A of Borsuk, the various retention devices are not shaped as a ring or cap.

Accordingly, Applicant respectfully submits that independent claim 1 is patentable at least for the reasons discussed above.

Moreover, with respect to the rejection of independent claim 2, Borsuk does not teach or suggest the claimed ferrule having a main body formed with a hole into which a core wire of the optical fiber is inserted and a positioning member monolithically formed with the main body. As discussed above, none of the various embodiments of Borsuk 's monolithic retention devices 70,

RESPONSE UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 10/705,233

100, 200, 10” could reasonably be considered the claimed *ferrule* having a main body formed with a hole into which a core wire of the optical fiber is inserted.

Applicant also respectfully submits that dependent claims 3-5, 7, 9, and 10 are patentable at least because of their dependency from one of claims 1 and 2.

Claims 6 and 8

Applicant respectfully traverses the rejection of dependent claims 6 and 8. With respect to dependent claims 6 and 8, the Examiner acknowledges that Borsuk teaches away from the claimed invention³. However, the Examiner has maintained the rejection of these claims, relying solely on caselaw.

As discussed at MPEP §2144.04, it is inappropriate for the Examiner to rely solely on case law when Applicant has demonstrated a criticality to the specific limitation. In fact, the feature that the Examiner asserts as being obvious is a critical feature of the invention. That is, by providing an adhesive with a refractive index selected so as to be greater than a refractive index of a material forming the leading end portion, so that the refractive index difference corresponds to a numerical aperture of the core wire, the adhesive within the clearance can act as an advantageous light guide. The fact that the adhesive has a numerical aperture that correspond to a numerical aperture of the core wire allows the adhesive to have similar properties to the core wire, and therefore effectively act as an extension of the core wire.

³ See Office Action dated January 21, 2005 at last paragraph of page 5.

RESPONSE UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 10/705,233

Moreover, the Examiner has not pointed to any objective evidence⁴ of a motivation or suggestion to modify Borsuk so that a refractive index is selected so as to be greater than a refractive index of a material forming the leading end portion, so that the refractive index difference corresponds to a numerical aperture of the core wire. The applied reference, Borsuk merely discloses that the refraction index of the adhesive is similar to the glass and plastic material, but says nothing regarding the numerical aperture of the adhesive.

Finally, the case cited by the Examiner, *In Re Boesch and Slaney*, is only applicable to the optimization of a variable that has been recognized as achieving a result. See MPEP §2144.05. In *In Re Boesch and Slaney*, the claims were directed to a material having specific amounts of nickel and other elements. The Board of Patent Appeals and Interferences found that “lowering the N_v value of a Co-Cr-Ni alloy and deletion of metals not consumed in precipitation from the N_v calculation are expressly suggested” by prior art reference U.S. Patent No. 3,837,838. See *In Re Boesch and Slaney*, 205 USPQ at 219. The U.S. Court of Customs and Patent Appeals relied on this evidence when it upheld the Board’s decision.

⁴ The USPTO is held to a *rigorous* standard when trying to show that an invention would have been obvious in view of the combination of two or more references. See, *In re Sang Su Lee*, 61 USPQ2d 1430 (Fed. Cir. 2002), *citing*, e.g., *In re Dembiczak*, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (“Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.”). In *Lee*, the Federal Circuit further emphasized that the “need for specificity pervades this authority.” (*Lee* at 1433 (*citing In re Kotzab*, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (“particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed”))). The factual inquiry into whether to combine references “must be based on objective evidence of record.” *Lee* at 1433.

RESPONSE UNDER 37 C.F.R. § 1.116
U.S. Appln. No. 10/705,233

In contrast, in the present case, as discussed above, we see no evidence of a suggestion to modify the refraction index of Borsuk's adhesive.

Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of dependent claims 6 and 8 at least because of their dependency from claim 1 and for the reasons discussed above.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: May 20, 2005

Attorney Docket No.: Q78419